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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|-------------|----------------------|---------------------|------------------|
| 10/757,475 | 01/15/2004 | Young Dae Kim | YHK-0130 | 4148 |
| 34610 | 7590 | 12/29/2005 | EXAMINER | |
| FLESHNER & KIM, LLP | | | A, MINH D. | |
| P.O. BOX 221200 | | | ART UNIT | |
| CHANTILLY, VA 20153 | | | PAPER NUMBER | |
| | | | 2821 | |

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/757,475 | Applicant(s) KIM ET AL. | |
| | Examiner Minh D. A | Art Unit 2821 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 21, 45 and 46, the phrase " at least one prescribed pulse which is provided to the scan electrode between the initialing pulse and the scanning pulse" renders the claims indefinite because they are unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 47-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Myoung et al (US 6,876,343).

Regarding claim 47, Myoung discloses a method of driving a plasma display panel comprising: providing a plurality of first signals to at least one scan electrode; providing a plurality of second signals to at least one sustain electrode; and providing a plurality of third signals to at least one address electrode, wherein the plurality of first signals are provided based on an initialization period, an address period, and a sustain period, wherein a prescribed period is provided between the initialization period and the address period, and at least one signal is provided during the prescribed period of time. See figures 6-8, col.6, lines 58-67 to col.11, lines 1-50.

Regarding claim 48, Myoung discloses wherein the plurality of second signals includes providing at least one sustain pulse during the sustain period. See figures 6-8.

Regarding claim 49, Myoung discloses wherein the plurality of third signals comprises providing data pulses during the address period. See figures 6-8.

Regarding claim 50, Myoung discloses the prescribed period is shorter than the address period. See figures 6-8.

Regarding claim 51, Myoung discloses wherein the prescribed period is shorter than the initialization period. See figures 6-8.

Regarding claim 52, Myoung discloses wherein the prescribed period is longer than a width of a sustain pulse. See figures 6-8.

Allowable Subject Matter

5. Claims 21-46 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

6. The following is a statement of reasons for the indication of allowable subject matter:

Prior art does not teach that, a plasma display apparatus comprising a scan electrode and a sustain electrode formed on a first substrate; an address electrode formed on a second substrate; a plurality of barrier ribs provided between the first and second substrate; a cell being defined by the scan, sustain and address electrodes, and the plurality of barrier ribs, wherein the plasma display apparatus is configured to provide at least one signal to at least one of the scan electrode, the sustain electrode or the address electrode, and the at least one signal includes an initialing pulse, *which* is provided to said scan electrode during an initialization period, a scanning pulse, which is provided to said scan electrode during an address period, a first sustaining pulse, which is provided to said scan electrode during a sustain period, a second sustaining pulse, which is provided to said sustain electrode during the sustain period; and at least one prescribed pulse, which is provided to said scan electrode between said initialing pulse and said scanning pulse recited in independent claim 21.

Prior art does not teach that, a plasma display apparatus comprising a scan electrode and a sustain electrode formed on a first substrate; an address electrode formed on a second substrate; a plurality of bathher ribs provided between the first and

second substrate; a cell being defined by the scan, sustain and address electrodes, and the plurality of barrier ribs, wherein the plasma display apparatus is configured to provide at least one signal to at least one of the scan electrode, the sustain electrode or the address electrode, and the at least one signal includes an initialing pulse, which is provided to said scan electrode during an initialization period, a scanning pulse, which is provided to said scan electrode during an address period, a first sustaining pulse, which is provided to said scan electrode during a sustain period, a second sustaining pulse, which is provided to said sustain electrode during the sustain period; and at least one prescribed pulse, which is provided to said scan electrode between said initialing pulse and said scanning pulse, wherein said initialization period includes a set-up period in which said initialing pulse changes to a second voltage after said initialing pulse has changed to a first voltage, said second voltage being higher than said first voltage, said initialization period includes a set-down period in which said initialing pulse changes to a fourth voltage after said initialing pulse has changed a third voltage, said fourth voltage being lower than said third voltage, and said initialing pulse is longer than said prescribed pulse in recited in independent claims 46 and 47.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kanazawa et al (US 6,528,952) and Setoguchi et al (US 6,906,690) are cited to show a plasma display.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

Primary Examiner


Examiner

Minh A

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12/19/05